RECORD OF DECISION

Temporary Deviation in Water Levels
Lake Tohopekaliga Extreme
Drawdown for Habitat Enhancement
Osceola County, Florida

DECISION

Notice of Availability of the Final Environmental Impact Statement (FEIS) was provided to the public by Federal Register on 7 June 2002. We have reviewed the FEIS for the Lake Tohopekaliga Extreme Drawdown for the purpose of Habitat Enhancement. We have also reviewed all correspondence; comments on the Draft and FEIS; views of other agencies, non-governmental organizations, and the public; and all pertinent documents for this project. Based on this review, I concur in the District Engineer's recommendation to implement the plan identified as Alternative 4w in the FEIS. The selected plan consists of a drawdown schedule of operations as described on pages 6-9 in the FEIS. All practicable means to avoid or minimize adverse environmental impacts were considered and incorporated into the proposed project. Given the constraints of the current project features and authority, this plan which proposes using gravity flow to lower the water level on Lake Tohopekaliga (Toho), on balance is the most practicable and feasible alternative and provides overall net positive environmental benefits.

The selected plan is to drawdown Lake Toho to 49.0 feet, with the option to lower the lake down to 48.5 feet in order to provide flows down stream. Lakes Kissimmee, Hatchineha, and Cypress will be lowered to 49.0 feet, with the option to lower them down to 48.0 feet in order to provide flows down stream. The drawdown is being timed to allow water levels to be lowered for 90 days to allow drying and consolidation of the muck and detritus that has accumulated as a result of unnaturally stable water levels. A Department of Army (DA) permit was issued to allow the Florida Fish and Wildlife Conservation Commission to remove aquatic vegetation and organic material from Lake Toho in order to enhance aquatic habitat. The material will then be placed in upland disposal sites if available or used to create in-lake disposal islands in accordance with permit guidelines. A request to modify the permit is currently under review by the US Army Corps of Engineers (Corps) Regulatory Office. To facilitate work at Lake Toho, East Lake Toho from mid-March to 1 June will be managed to follow a more gradual lowering than shown on the current approved regulation schedule, with a low pool of 56.5 feet on 1 June.

PROJECT AUTHORITY AND NEED FOR PROPOSED ACTION

The proposed project is authorized under 33 CFR 222.5, Water Control Management (ER 1110-2-240). Lake Toho is a part of the upper Kissimmee River chain of lakes. Water control structures at Lake Toho are part of the Central and Southern Florida Project (C&SF). The C&SF was designed and constructed by the Corps. Project

purposes include flood damage reduction, water supply, preservation of fish and wildlife, recreation, and navigation. The South Florida Water Management District (SFWMD) operates and maintains the project works in accordance with Corps approved criteria. The project proposed by the Florida Fish and Wildlife Conservation Commission (FWC) and reviewed by the Corps and SFWMD is a temporary deviation from lake regulation schedules that would allow lake levels to be lowered for the purpose of improving habitat for fish and wildlife species.

ALTERNATIVES AND CONSIDERATIONS BALANCED IN MAKING THE DECISION

The scoping phase of the EIS process resulted in the identification and evaluation of a wide array of alternatives that are presented in Table 1 of the EIS. Pumping alternatives that would allow Lake Toho to be lowered independently of the other lakes were identified to be environmentally preferable by some resource agencies. The source of their concern with drawing all the lakes down (as would be done under Alternative 4w) appeared to be a perception that conditions were very dry throughout the region and that the downstream lakes would not be able to refill which would result in unnecessary detrimental effects on aquatic resources, particularly snail kites and apple snails. However, over the past year hydrologic conditions have returned to normal and this is less of a concern for the agencies. I concur with the agency positions (and the information they have provided in the EIS) that drawing all the lakes down would have more impacts than drawing down only Lake Toho (as would be the case with the pumping alternative). However, based on the rate at which we anticipate the downstream lakes to recover during a “normal” wet season following the drawdown, we expect that the selected plan will have minimal adverse impacts on downstream aquatic resources. Additionally, a pumping alternative is logistically infeasible, costly to implement, and represents a structural alternative that is not consistent with the authorized project.

The Corps considered all applicable laws, executive orders, regulations, and local government plans in evaluating the alternatives. Interagency coordination resulted in the identification of ten alternatives to accomplish the extreme drawdown. Three alternatives were evaluated in great detail in the FEIS: (1) Alternative 10 - No Action. As the name suggests, the existing approved lake regulation schedule would continue to be implemented. In this scenario, the lakes would continue to accumulate muck; (2) Alternative 1 - Gravity flow (without flexible refill); and (3) Alternative 4w – Gravity flow (with flexible refill). Alternative 4w was identified as the preferred alternative. The difference between gravity flow alternatives 1 and 4w is that the 4w latter allows for additional flows down stream during drawdown and refill periods.

FACTORS CONSIDERED TO MINIMIZE ADVERSE IMPACTS AND ADDRESS PUBLIC CONCERNS

The C&SF project is a multi-purpose project. The SFWMD and the Corps manage this system to serve these various project purposes that are sometimes in conflict. From that standpoint, the proposed project can be controversial. Some concerns associated with drawing the water levels down are impacts to snail kites, potential impacts to groundwater levels, potential impacts to the Kissimmee River Restoration (KRR), potential wildfire hazards, and water supply issues.

Snail kites use all of the lakes that will be affected by the drawdown. This project was fully coordinated under the Endangered Species Act (ESA). No critical habitat has been designated within the action area for this species, and consequently none will be affected. The Fish and Wildlife Service issued a biological opinion (BO), dated 3 July 2002, which addresses the endangered Everglade snail kite and the effects of the proposed action on this species. While the BO concludes that there will be some species response to the proposed action, the drawdown and habitat enhancement projects are not likely to jeopardize the continued existence of the species. The Corps has accepted all of the FWS's terms and conditions in the BO, as amended by letter dated 3 October 2002, to minimize any impacts to the snail kite.

Fish farmers in the area are opposed to the drawdown because of concerns that the lake drawdown will lower groundwater levels at their farms. The SFWMD used a proprietary model called MIKESHE in its analysis of the drawdown project's effects on adjacent groundwater levels. Although some objections were received to use of this model because its proprietary code was not reviewed, accepted practice is to evaluate models primarily based on their previously demonstrated reliability, appropriateness to the application and calibration/verification results rather than a review of their underlying code. Based on a review of the calibration report and technical analysis, and the Corps' experience in evaluating models, I am satisfied that this structured grid model performs well, and I am satisfied that the analysis submitted by the SFWMD is a reasonable assessment of groundwater responses in the basin to the drawdown and drought conditions presented.

By letter dated 29 October 2002, the Osceola Fish Farmers Association, Inc. indicated their intent to take legal action for perceived violations of an order issued by an Administrative Law Judge on November 6, 2001 (Case No. 01-2900RP) and upheld by the District Court of Appeal, First District of Florida (Case No. 1D01-4845). These cases relate to State of Florida rules and regulations that pertain to consumptive use permitting. The SFWMD issued a consumptive use permit to the FWC on 13 June 2002 for the Lake Tohopekaglia Habitat Enhancement Project. The terms and conditions of the permit provides for the mitigation of adverse impacts to existing legal uses a consequence of the water level drawdown by the FWC.

Numerous Federal and State agencies, along with local fishing guides have voiced concerns related to the proposed in-lake disposal islands. EPA has requested that

results of the effects of the discharge of fill material (404(b) determination) associated with the removal of organic material from Lake Toho be documented in the ROD. The Florida FWC requested and was issued a Corps regulatory permit to use material dredged fro the lake bottom to build islands in Lake Toho in April 1999 (Permit No. 1998-05442 (IP-EB). The effects of the fill action on the environment was reviewed in accordance with the 404(b)(1) Guidelines through the regulatory permit process and associated compliance with the National Environmental Policy Act. The Corps Regulatory office concluded that the proposed fill action complies with the 404(b)(1) Guidelines and a permit was issued**.** It was demonstrated through the review process, that the proposed project is the least environmentally damaging practicable alternative considering costs, existing technology, and logistics. It would not cause or contribute to violations of State Water quality standards, jeopardize the existence of any endangered species or impact a marine sanctuary. No degradation is expected and all appropriate and practicable steps have been taken to minimize impacts. The project will actually improve habitat for endangered species such as the bald eagle and the snail kite. The Corps Regulatory Office is currently evaluating a request to modify the existing permit to include the removal of additional organic material from Lakes Toho, Cypress, and Hatchineha and in-lake disposal. Regulatory agencies and the interested have the opportunity to comment on the in-lake disposal options through the regulatory process.

The preferred alternative was developed in order to reduce potential impacts to the Kissimmee River Restoration project area by including operational provisions that would help maintain continuous outflows from the upper Kissimmee basin to the Kissimmee River during and after the proposed drawdown**.**

Any potential risk of increased wildfires as a result of the drawdown is expected to be low. If by chance a wildfire should result from the dry conditions along the lake shoreline, we anticipate that the fire would be easily contained. If this should become a continuing issue, we will make every effort to reassess this issue and work with interested parties to find a reasonable and practicable solution.

Another potential concern is with water supply. While not anticipated, the temporary lowering of the water levels may cause adverse impacts to existing legal uses. As lead local sponsor, the FWC would be responsible for mitigating those impacts in the event they occur. The SFWMD will monitor surface and groundwater levels in the Lake Toho area and provide groundwater data to the Corps on a periodic basis. The SFWMD already provides surface water level data for the Lake Toho area on a daily basis. The Corps will review any information about the situation provided by SFWMD, the fish farmers, or their attorneys. If, in the future, it is determined that the drawdown appears to be causing an unanticipated lowering of aquifer levels at any of the fish farms, the Corps staff, SFWMD, and FFWCC will determine what actions, if any, are necessary at that time. We understand that SFWMD will continue its monitoring efforts until water levels return to their seasonal conditions. The Corps will continue its review efforts until water levels return to their seasonal conditions.

Supporters of the drawdown include FWC, which is responsible for managing the natural resources within the lakes, as well as homeowners and other members of the public. FWC has documented the results of previous drawdowns at Lake Kissimmee and Lake Toho. As described in the FEIS based on documentation by FWC these drawdowns have resulted in environmental benefits by reducing sedimentation, helping desirable plant communities become re-established, and improving aquatic organisms and sport fish populations.

The State Historic Preservation Officer (SHPO) has stated that the proposed project would not affect historic properties and is in compliance with the National Historic Preservation Act and the Archeological and Historic Preservation Act with the stipulation that the FWC retain an archeological consultant to develop a plan for the protection of significant resources in the area. The plan will ensure that resources are located, marked, and protected during project activities.

By letter dated 25 August 2002, the Florida State Clearinghouse provided their determination that the proposed project is consistent with the Florida Coastal Management Program.

SUMMARY

In view of the above, I find that Alternative 4w provides the best practicable means to lower water levels while avoiding and/or minimizing adverse impacts, including those to the Kissimmee River Restoration Project. Measures to prevent or minimize impacts to snail kites will be implemented in accordance with the BO and subsequent discussions with the FWS during an interagency meeting on September 24, 2002. Measures include quarterly monitoring of kite activities during the project and apple snail monitoring for a minimum of three years after initiation of drawdown. FWS will be notified of the final determination on whether to proceed with the proposed activity. The proposed action is consistent with all applicable laws, regulations, national policy, and administrative directives. After careful review of all concerns, my decision is to implement Alternative 4w as described in the FEIS. This Record of Decision completes the National Environmental Policy Act (NEPA) process.

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Date:

PETER T. MADSEN
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